MEETING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

MONDAY, JUNE 25, 2001 3:30 P.M.

Reported by: Valorie Phillips Contract No. 150-99-001 ii

COMMISSIONERS PRESENT

Michal Moore, Presiding Member

STAFF PRESENT

W. William Wood, Jr., Chief Natural Gas Forecaster

ALSO PRESENT

Pat Wood, Commissioner, Federal Energy Regulatory Commission

Nora Brownell, Commissioner, Federal Energy Regulatory Commission

Cynthia Marlette, Deputy Chief Counsel, Federal Energy Regulatory Commission

Robert McNally, Special Assistant to the President for Economic Policy National Economic Council

Loretta Lynch, President, California Public Utilities Commission

Trina Horner, Advisor, California Public Utilities Commission

Richard A. Myers, Program and Project Supervisor California Public Utilities Commission

Kip Wiley, Principal Consultant California Senate Office of Research

Anna Ferrera, Consultant California Senate Office of Research

Lawrence Lingbloom, Senior Consultant California Senate Energy Utilities and Communications Committee

Daniel F. Thomas, Director Pacific Gas and Electric Company

ALSO PRESENT

Philip H. Davies, Vice President and General Counsel Wild Goose Storage, Inc.

Michael B. Day, Attorney Goodin, MacBride, Squeri, Ritchie and Day, LLP

Ron Walter, Senior Vice President Calpine Corporation

Craig Chancellor, Gas Regulatory Manager Calpine Corporation

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Τ	PROCEEDINGS
2	3:30 p.m
3	PRESIDING MEMBER MOORE: Good afternoon
4	Commissioner Wood, Commissioner Brownell, I'm
5	Michal Moore, Commissioner here at the Energy
6	Commission. And it's my absolute great pleasure
7	to welcome you to Sacramento and to California,
8	and to say how happy we are to have you on the
9	FERC, well, I'd better say Federal Energy
10	Regulatory Commission. I'm forcing people here to
11	join the NAP no acronyms, please Club.
12	(Laughter.)
13	PRESIDING MEMBER MOORE: And so I have
14	to join it, myself, and make sure that I use as
15	few of those as possible.
16	COMMISSIONER BROWNELL: You're better
17	than the telecommunications community any day.
18	PRESIDING MEMBER MOORE: Well, I want to
19	welcome you here, and I understand that you have a
20	pretty schedule trying to meet with the
21	Legislative Representatives and other key
22	individuals in the state.
23	And I say, welcome. We're going to
24	discuss gas matters today. And I hope that our
25	presentations that we've organized will prove

- 1 informative for you and will allow you to ask the 2
- kind of questions you need to ask and gain access
- to information for the future that will make the 3
- job a little bit easier.
- 5 First, I would like to say that we
- issued a report out of the Committee that I chair, 6
- which is the Electricity and Natural Gas Committee
- 8 here. And it is that report that we'll use in my
- remarks to frame some of the gas issues facing the 9
- 10 State of California.
- 11 It is a staff report and I am privileged
- to have some of the best staff in the world to 12
- support me in this. It is a public document. 13
- It's been out. It's available on the web. And I 14
- 15 know that we have a number of people who are
- 16 listening in on the worldwide web to this, and I
- want to make sure that they know they can have 17
- 18 access to that in an html or acrobat format, just
- by going on our website. 19
- 20 The report was prepared with a lot of
- 21 time and expertise, and I want to acknowledge one
- of the key staff members who produced it who is 22
- here with me, Bill Wood, who has 25 years 2.3
- experience with the Commission and whose insight 24
- 25 allowed us to have some continuity between the

- 1 1989 report, which I'll reference in my remarks,
- 2 and the current report, which elaborated on some
- of the in-state capacity problems.
- 4 And I just want to say without Bill
- 5 there wouldn't be a report. I'm not going to say
- 6 there wouldn't be a Committee, because I'd still
- be on it. But I probably wouldn't have very many
- 8 facts to offer.
- 9 The report, by the way, has not been
- 10 vetted by the full Commission and is used here
- 11 really under the auspices of my own office and the
- 12 Committee. So I want to make sure that it's clear
- 13 to everyone here that this is not an Energy
- 14 Commission-sponsored report or set of conclusions.
- 15 It won't be until we have had a chance to work in
- the comments that have come to us, including
- 17 comments that were submitted by your Commission
- 18 under the letterhead of your Chairman, which we
- 19 received formally this morning.
- The report came about because of a
- change in conditions. We obviously enjoyed excess
- capacity in the mid to late '90s, and they
- 23 contributed to low natural gas prices in the
- state. Clearly, that's changed.
- 25 And I would say that we're now

- 1 reappraising ourselves of the model that we've
- 2 used, of the calculus that we've undertaken to try
- 3 and understand how gas works in the state, what
- 4 its role is.
- 5 And we have one slide that illustrates
- 6 just the system. It will come up on your screen
- 7 in front of you -- well, along with a lot of
- 8 Microsoft products.
- 9 (Laughter.)
- 10 PRESIDING MEMBER MOORE: -- on the
- 11 screen. I apologize, there should --
- 12 COMMISSIONER BROWNELL: We're liking the
- high tech world of California.
- 14 PRESIDING MEMBER MOORE: Welcome to
- 15 Silicon Valley, Sacramento.
- Let me just say, there's a map, and it
- 17 illustrates the gas system in California. And
- 18 you're undoubtedly familiar with it.
- The system, itself, was built on a
- 20 single coldest day model. It's designed much like
- 21 you would have expected from the Macy's parking
- 22 lot. They built parking to look at the day after
- Thanksgiving load.
- 24 And we've had some changes since that
- 25 model was first developed in the state. That

1 model bets on probabilities. You can understant	and
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- 2 that in any given year a probability of one in 75
- 3 that you might have a drought; a probability of
- 4 one in 50 that you might have a very very hot
- 5 year, coupled with other shortages in the system,
- 6 might produce massive shortages overall.
- 7 Frankly, when the probabilities
- 8 coalesce, which at some point they will, you blow
- 9 out the model. And we've had that happen, which
- 10 has caused us to start to rethink how we look at
- gas, how we look at the other elements in the
- 12 energy world.
- 13 We've had a convergence of the gas and
- 14 energy worlds, and that convergence is producing
- 15 unprecedented conditions that we're trying to deal
- 16 with, not only in the planning arena, but in the
- 17 regulatory, and frankly in the physical and
- 18 financial arena, as well.
- One of the fallout pieces of this is the
- 20 concern over all the gas plants that we're siting
- 21 in California, over 11,000 megawatts this year.
- 22 And growing to meet future demand, and growing to
- 23 meet our demand for backup capacity, and to retire
- 24 some of the old generation that is inefficient
- and, frankly, isn't going to meet all the needs.

1	You know what, why don't we stop. Let's
2	stop. You can get it ready for Cindy's
3	presentation I'm sorry, for Trina's
4	presentation. But let's just stop.
5	In terms of in-state and California
6	supply, I want to say that we're active with the
7	Legislature. We're trying to play a very
8	proactive role with the PUC, Public Utilities
9	Commission, and the utilities.
10	And we can point with pride to an
11	expansion of in-state facilities that's now going
12	on. And identify some other problems that we'll
13	have to deal with in the future, but really
14	looking at them as opportunities.
15	The low Btu problem, which you're
16	familiar with, presents a new market opportunity,
17	frankly, that some of the generators are poised to
18	take advantage of.
19	The gathering system that needs to be
20	updated; been a problem for northern California.
21	And presents an opportunity for a transfer to
22	producers who can take advantage of it and have an
23	incentive to hook up to wells that are further
24	afield than they might have been in the past.

In the interstate capacity arena, the

1	market is clearly responding. The price signals
2	are working; the market is working; and the
3	response is leading us where we need to go.
4	In the intrastate arena we've had, as
5	you read in our report, inadequate receipt
6	capacity. So even though you can see Sempra, in
7	the past, raising average capacity by 375 million,
8	it's clearly lagging behind what we would have
9	expected at this time.
10	And we're catching up, but there has
11	been a problem that I think, at least in part,
12	many of us were slow to recognize. And that
13	includes me and the Commission, as well as some of
14	the private players.
15	As Bill Wood, who I referred to earlier,
16	is fond of saying, and one of his most quotable
17	quotes, "Pipe's cheap and gas is expensive." And
18	we're perhaps slow to catch up to that.
19	In storage there's better news. The
20	near term is that we're filling at historic rates,
21	currently with no deficit. In the long term the
22	intrastate has to be coordinated, and if there's
23	any message that's coming out clearer and clearer,
24	we've got to coordinate with the interstate

capacity increases to make a difference.

1	In conclusion I might just say that as
2	you saw in our report, you can see that the
3	electricity and natural gas systems and demand are
4	inextricably linked. You don't have a crisis in
5	one without some corresponding impact in the
6	other.
7	And you can find ample evidence for that
8	by looking back at last summer and last winter
9	when storage was strained due to high electric
L 0	generation demand. And it's coupled with
L1	increased dependence on an electric world.
L 2	That points up another issue that at
L 3	least has to be addressed in the long term, and
L 4	that is that we are creating, by design, a natural
L 5	gas monoculture. And that brings with it its own
L 6	risks and the issue of diversity will rise up and
L 7	be something that we'll need to face in the
L 8	future.
L 9	Of the 50 or so plants that have been
2 0	sited or permitted in the west, every single one
21	is natural gas fired.
22	There's risk in all of this. And for an
23	economist, the risk is at least a calculable
2 4	event, but it's not always readily one hundred

percent definable.

1	So, we've got to describe it in terms of
2	certain parameters, certain conditions that we
3	know will come about and will change risk over
4	time.

We know there'll be disruptions in weather patterns over time. We know, or we think we're likely to have a very hot summer this year, and that it will impose strains on the system.

We now have two peaks instead of one.

We used to plan for a single peak; we've now got

two peaks. The question that begs answering is

whether or not we do plan for both. Do we need to

redesign the system so as to take advantage of two

peaks, and imagine the storage facilities that

will complement that.

And finally, we have to imagine that
we're part of, limited by, and responsible for a
whole western grid. To use John Muir's old
phrase, "When you lift up a plant out of the earth
and find out that the roots are tied to everything
else in the universe" we are tied to the western
grid. We are part of it, we're not an island.
And our planning in the future has got to take
that into account.

To do that, to undertake that next step,

1	at the Energy Commission we're undertaking
2	comprehensive risk analysis, infrastructure
3	planning, if you will, to simulate the response of
4	the system to changes in market and environmental
5	conditions.
6	And we hope to use that planning process
7	to become a critical link in the overall
8	regulatory system.
9	Frankly, without a fundamental change in
10	infrastructure planning, there won't be anything
11	that prevents high prices from occurring again and
12	again and again in the future, and that very
13	predictable.
14	The Committee, as I said, will
15	ultimately pass this on to our full Commission.
16	And we will then take all the comments that we got
17	in public hearings, including those from your
18	Commission, into account. We'll publish a final
19	report.
20	And then we'll undertake the risk
21	analysis as the next step in our process. And
22	hope to work very very closely with you and your
23	staff in that next step.

24 And, Commissioners, with your 25 permission, and you may have questions on the

1	report or some of this, but if I may, with your
2	indulgence, I'd like to introduce the President of
3	the Public Utilities Commission, who would like to
4	introduce one of her staff to talk about their
5	role in this ongoing process.
6	Ms. Lynch.
7	COMMISSIONER LYNCH: Thank you. Thank
8	you, Commissioner Wood and Commissioner Brownell.
9	We really appreciate you being here to

get an update about where California is in our process of solving our problems and working with you to reform the system.

As we have talked before, California really has turned a corner and is doing everything possible to both expand supply on the electricity side, as well as on the natural gas side.

And the Public Utilities Commission really has changed direction in terms of an active role of both encouraging storage, as well as more capacity, on the intrastate lines.

It's really a question, from my perspective, leaving aside some of the complaints that we have before you about particular activity, it's really a question of the grasshopper and the ant. And how we prepare for our capacity needs.

1	And what I'd like to do is introduce my
2	natural gas Advisor, Trina Horner, who has just a
3	very short little presentation, which is an update
4	of what the PUC has done in conjunction with the
5	state, over the last year, to be the ant and not
6	the grasshopper, and prepare for next winter.
7	MS HORNER: Good afternoon I just

have a few details to follow up on Commissioner

Lynch's introduction about ways that California is

trying to be productive and proactive on insuring

that we can meet our natural gas capacity needs,

both on the pipeline capacity and the storage

capacity side.

And I have a presentation which is on the screen, but also I have a few just reference materials. One of which is a list of all of the PUC dockets that might be handy for you to refer to back to. And that kind of shows you the different proceedings, and what we're doing where.

I've been working at the PUC mostly on natural gas issues for about nine years. And generally have participated on the FERC side, but have also participated in our active regulation of the intrastate facilities.

And in that sense, the PUC for

- 1 California focuses on three main things. We
- 2 regulate the local distribution and local
- 3 transmission of natural gas, including
- 4 procurement.
- 5 We also regulate the intrastate pipeline
- 6 per the Hinshaw amendment to the Natural Gas Act.
- 7 And, finally, we oversee the
- 8 interconnection of in-state production and
- 9 gathering of natural gas.
- 10 We also, as you know, are active in
- 11 representing the State of California in
- 12 proceedings at your Commission.
- 13 I think Commissioner Moore pretty
- 14 accurately described the different trends in
- 15 California that we've noticed, especially during
- 16 the last year. And that is the changing supply
- 17 and demand swings from what we're historically
- 18 used to, and there being more than one peak on the
- 19 system now.
- We've also seen, as you're aware,
- 21 extremely high prices just out of the range of
- 22 sanity, almost. And so we've really been
- 23 struggling to find a way to manage that. And we
- really think that the way to do that is to add
- more capacity to the state.

1	And so in the next couple of slides I've
2	got some details about what the California PUC has
3	been doing to insure that.
4	First, we've been increasingly focusing
5	on the ways that electricity and natural gas
6	interact in the California market. And we've been
7	taking a look at a number of our policies.
8	For example, one is to look at the
9	natural gas storage needs and capacity needs of
10	the electric generators who are no longer owned by
11	the utilities, and who don't do their planning
12	anymore in a more coherent fashion to maximize the
13	intrastate system.
14	And so in California we have
15	historically unbundled from the larger users
16	transportation rates elements like storage. And
17	we are looking now to see if we need to be
18	reconsidering that. Because electric generators
19	and their use of storage, as we increasingly saw
20	last winter and this spring, have a very
21	important their use of storage has a very
22	important impact on the pipeline system.
23	Another thing that we're doing is we're
24	modifying our existing curtailment policies for
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

natural gas to basically be cognizant of the fact

- 1 that electricity reliability is a key concern for
- 2 California. So we're taking a look at the
- 3 generators' spot in the curtailment queue.
- 4 Another area we're focusing on is trying
- 5 to beef up our in-state capacity. And we're doing
- 6 that on a whole host of fronts. For example,
- 7 we're working to be sure that our own in-state
- 8 tariffs and policies are friendly to competition
- 9 and don't prohibit competition from the interstate
- 10 pipelines.
- 11 And right now we're working in
- 12 particular on the SoCalGas side to look at getting
- 13 rid of a tariff that we believe has been
- 14 prohibiting competition into the SoCalGas
- 15 territory. And I think once that tariff is
- 16 reformed, we hope to see an inflow of interstate
- 17 pipelines into southern California.
- 18 COMMISSIONER WOOD: Is that the RLS
- 19 issue?
- 20 MS. HORNER: That's the RLS issue.
- We're also working very hard with Southern
- 22 California Gas, in particular, to bring on line
- 23 additional capacity on that system. And by the
- end of this year we expect that they will have
- 25 just about 450 million cubic feet per day

- 1 additional, mostly through compression, brought on
- line. And some of that is already on line,
- 3 serving the San Diego system, which was
- 4 constrained last year.

facilities.

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5 We're also looking at redefining the criteria for what is a constraint on local transmission. Because, as new load comes onto the 8 utility systems, increasing backbone capacity is 9 one thing, but it's also going to be important for 10 users who are not located right off the backbone, 11 but are either on the distribution system or on the local transmission part, the smaller pieces of 12 pipe, that they still be able to get gas to their 13

And so as new users come and tap into the local transmission system, we're going to be taking a look at that, as well.

The next slide shows how the PUC has been working with SoCalGas on some of those compression projects that I discussed. Not all of those are compression. A couple of them, like the Kramer Junction Project, as well as the Line 6900, are also getting pipe into the ground.

And so we're really trying to look at the quickest way to add capacity. And I think

1	these expansions that we're getting on line by the
2	end of this year are our effort to look at where
3	was the quickest way to get new capacity on line.
4	And all of those together really tried

And all of those together really tried to maximize our supply diversity. So we're not just expanding in one spot. We're really trying to expand in places not only just to add capacity to the system, but to do that strategically so we keep our options open on supply basins.

COMMISSIONER WOOD: To follow up on that, I mean from looking at the map of where these are, this would seem to be a southern California issue. But, is there an ability to move gas from your Canadian sources on down through the state, all the way to the south?

Or does Canadian gas stay kind of north of Bakersfield, or not Bakersfield, but just kind of a mid part of the state, and then -- or is there an ability to move gas totally within the state?

MS. HORNER: There is an ability to move gas, Canadian gas, all the way to southern

California. And one of the expansions that you see here, the 85 million a day at Wheeler Ridge -
Wheeler Ridge is one of the points where Canadian

- 1 gas is brought down through the state. That's a
- 2 major interconnection point in California.
- 3 So as I said, the items in the first
- 4 bullet are really what we're looking at to quickly
- 5 beef up capacity in California. But we're looking
- 6 beyond that. And we've got a number of projects
- 7 that we're very optimistic about, going beyond
- 8 into next year.
- 9 PG&E, for example, is in the midst of
- 10 putting together an open season for additional
- 11 capacity on its system to bring in Canadian gas.
- 12 And we are working with SoCalGas to identify more
- 13 projects to expand capacity on their system.
- 14 In addition to that we're not focusing
- 15 just on pipeline capacity, but on storage. And
- 16 just last week, Wild Goose filed to expand their
- 17 system. I'm sure they'll be happy to tell you
- 18 about that.
- And we're very actively following all of
- the interstate pipeline proposals. And are
- 21 talking with folks and willing to work in terms
- of, you know, removing barriers to getting
- interstate pipelines into California.
- 24 As I said earlier, removing the RLS
- 25 tariff on SoCalGas, I think, will be a big step in

- 1 that direction.
- 2 COMMISSIONER WOOD: From that latter
- 3 point, just from your perspective, where you are
- 4 at the Commission, do you see there's anything
- 5 that FERC could be doing that we're not doing, or
- 6 haven't moved quickly enough on with regard to
- 7 some of this expansion of interstate pipeline
- 8 capacity?
- 9 MS. HORNER: Well, I think we were very
- 10 gratified on the quick action on the Kern River
- 11 expansion. And it's expansions like that that are
- 12 able to be accomplished very quickly by adding
- 13 compression that make a lot of sense for
- 14 California. And so we really do appreciate FERC
- acting so quickly on that.
- 16 COMMISSIONER WOOD: Now, Commissioner
- 17 Breathitt dissented on part of that and was
- 18 concerned that despite the actions that FERC took
- there would not be -- that wouldn't actually
- 20 result in a net increase of deliverability to an
- 21 end user in California.
- Is that true? I mean, is that right, or
- has that been changed by some of these other
- 24 actions that the California Commission has taken?
- 25 MS. HORNER: Well, I think that, you

- 1 know, a lot of these pipelines, then the PGT
- pipeline coming in from Canada is another example.
- 3 They come from producing basins that are not right
- 4 next to California.
- 5 And so as generation projects go all
- 6 around in the western United States, they get a
- 7 fair chance to bid for capacity and to take
- 8 capacity that wouldn't necessarily, you know, come
- 9 all the way to California.
- 10 But I think that we want a fair chance,
- 11 and we have a fair chance, California end users,
- 12 to bid for that capacity. That's, I think, our
- main goal, is to insure that we have a fair
- opportunity to bid for that capacity in the open
- 15 seasons that you oversee.
- 16 COMMISSIONER WOOD: Kind of the big
- picture, the actions that you've talked about,
- that Commissioner Moore's report discusses, that
- 19 the Federal Commission has taken to kind of make
- 20 the two parts of the pipe flange together, how
- 21 close are we to having what I think the CEC report
- 22 characterized as slack capacity, how close are we
- 23 to having that to handle a big summer like we had
- last year, and a big winter like we had last year,
- assuming that that continues into the future?

1	I mean just kind of are we there yet?
2	And if not, when are we going to get there? Any
3	kind of thoughts on that?
4	COMMISSIONER LYNCH: I would note,
5	though, that we didn't have really that much more
6	of a big summer last year than we had the summer
7	before.
8	When you look at the demand curves we
9	bought about the same amount of natural gas in
10	2000 than we did in 1999. It just cost us 80
11	percent more.
12	So, I think that there's a misnomer here
13	that we have this vastly expanding supply. We
14	will, as Governor Davis brings more plants on
15	line. But last summer we did not have, you know,
16	significant additional plant capacity that was
17	using natural gas on line.
18	And when you look at just the volumes,
19	they were essentially equivalent. It was really a
20	pricing issue, from my perspective, last year.
21	And perhaps a flow-through issue about who was
22	holding back capacity.
23	But, in terms of building it out in
24	California, I think that the next two years are

going to really tell the tale. And we are pulling

- out all the stops to build as much as possible in
- 2 the next two years.
- 3 But as much capacity in storage as
- 4 possible will not solve the pricing problem
- 5 without effective enforcement.
- 6 COMMISSIONER WOOD: So I quess kind of
- 7 looking back at the kind of philosophy we're
- 8 taking on electricity, too, that once there's some
- 9 excess in the market then there's some room for
- 10 competition to start to actually compete, because
- 11 people can't lay out of the market and think
- 12 they're going to affect it. They'll just be
- 13 forgotten because somebody else will come take the
- 14 spot.
- And I guess the same would hold true
- 16 certainly on over-building the gas delivery system
- 17 slightly.
- 18 COMMISSIONER LYNCH: And effective
- 19 conservation and energy efficiency efforts on the
- gas side, as well.
- 21 COMMISSIONER WOOD: Which dampens down
- the -- right.
- 23 COMMISSIONER LYNCH: Right, dampens down
- 24 demand. A chunk of our public goods charge moneys
- go to gas energy efficiency, as well as

1	electricity energy efficiency, so that we can
2	continue and hopefully overtake Rhode Island as
3	the most efficient state in the nation, both on
4	gas as well as electricity.
5	So we are, you know, we are pursuing
6	that multi-pronged strategy, as well as a
7	renewable strategy, whereas if we get additional
8	capacity on line from renewables, they'll have
9	some competition with some of the gas-fired
10	electricity generation, at least.
11	So we really see it as a three-pronged
12	approach. Energy efficiency and conservation; a
13	diversity of fuel supply for the electric
14	generator market; and then, of course, additional
15	capacity.
16	But all of those tie into what is the
17	price.
18	COMMISSIONER WOOD: And so just back to
19	that interesting fact, the usage of natural gas in
20	California in the summer of 2000 was roughly at
21	par with what it had been for the prior few
22	summers?
23	COMMISSIONER LYNCH: The usage of

natural gas in 2000, as a whole, was roughly at

par with the usage of natural gas in California in

24

25

- 1 1999. We can get you the exact figures. But it's
- 2 pretty --
- 3 COMMISSIONER WOOD: Okay, that's good
- 4 information to have.
- 5 COMMISSIONER LYNCH: It's pretty clear.
- 6 Yeah. And we are all anticipating a significant
- 7 expanded growth as these new gas-fired plants come
- 8 on line. But in 2000 California operated with the
- 9 same physical plant, by and large, in terms of the
- 10 large plants, as they had for the last 30 years.
- 11 COMMISSIONER BROWNELL: Could I ask,
- 12 there seems to be consensus on the need for
- 13 additional infrastructure and additional supplies
- 14 based on your projections of these new plants
- 15 coming on line.
- 16 SoCal would seem to suggest that, in
- 17 fact, there is not an increased need; that that
- 18 need will diminish as more efficient plants come
- on. And I'm wondering -- and apparently some
- 20 reference to reliance on plants being built out of
- the state, in Arizona, perhaps, it wasn't
- 22 specific.
- One, that seemed to be counter to the
- 24 policy that California was pursuing, which was to
- 25 be less dependent on imports. And, two, I

- 1 wondered how you reconcile that kind of an opinion
- and whether that's consistent -- doesn't seem to
- 3 be consistent with where you're going or where
- 4 Commissioner Moore is suggesting that we go.
- 5 COMMISSIONER LYNCH: Well, I think it is
- 6 true that the newer the plant the more efficient
- 7 the plant. And so if you're essentially switching
- 8 out an old inefficient natural gas plant for a new
- 9 efficient one, then theoretically you wouldn't
- 10 have to use that.
- 11 But for the next several years
- 12 California is going to need all the supply it has,
- 13 whether it's old or new, borrowed or blue, we're
- 14 going to need it all.
- So, from my perspective we should be so
- 16 lucky to have an overbuilding in natural gas at
- 17 this point. And I think we can deal with those
- 18 issues if there are any in the future. But I do
- think that that does show the need for the state
- and the federal government to work together to
- 21 carefully monitor not only what's happening in
- 22 California, but what's happening in the west, so
- that we make sure that, from our perspective,
- 24 California can be sufficiently energy independent,
- 25 but from a western region perspective we make sure

- that there's not too much over-building, if we can
- 2 imagine that day.
- 3 But we know from history that that day
- 4 has come before. It will come again. And we just
- 5 need to be more active, as governments, to shape
- 6 that supply scenario, I think.
- 7 PRESIDING MEMBER MOORE: Commissioners,
- 8 maybe I can amplify on that a little bit. Bill
- 9 Wood has been looking at that for us, and maybe we
- 10 can amplify on what Commissioner Lynch has just
- 11 said.
- 12 Bill, can I ask you to address some of
- 13 those, the question on the Sempra statement that
- 14 was made in our hearing about excess capacity?
- 15 COMMISSIONER WOOD: It's referred to on
- 16 43 and 44 of your report, too.
- 17 MR. WOOD: My name is Bill Wood; I'm the
- 18 Chief Natural Gas Forecaster here at the Energy
- 19 Commission.
- 20 In essence Sempra has indicated that
- 21 they have designed their system to meet an average
- 22 peak day, or an average year requirement, and that
- 23 under the present pipeline situation that they
- have, that they're able to meet their gas demand
- 25 without adding any additional capacity onto their

- 1 system.
- 2 And that has pretty much been
- 3 demonstrated during this last year, that they
- 4 have, indeed, been able to meet the requirements,
- 5 given that we had a very abnormal winter this
- 6 year. Electric generation requirements for the
- 7 state were not that much different than they have
- 8 been in previous years, but nevertheless, during
- 9 the winter months our electric generation demand
- 10 was between two and three times what you would
- 11 normally anticipate for the wintertime.
- 12 We were seeing gas demand in power
- 13 generation this winter in the area that you would
- 14 anticipate seeing in August, rather than in
- 15 winter. And on top of that, then November was one
- of our colder months in history.
- 17 So, with regard to yes, the SoCalGas
- 18 system was designed, and has been adequately
- meeting its requirements. But our feeling is that
- 20 because of the lack of slack capacity within their
- 21 system, the pipeline, there is no competition then
- 22 between the different suppliers within the state,
- which has then triggered some of the pricing
- 24 problems that we have seen in southern California.
- 25 SoCalGas has agreed to move forward, and

- 1 to add at least 375 million cubic feet per day of
- 2 receiving capacity into their system. And that
- 3 that will be operational by this coming winter, as
- 4 Trina has indicated.
- An addition, they're also adding some
- 6 more storage availability into their system, which
- 7 will be available as soon as the PUC has agreed to
- 8 those two projects that they have going. One is
- 9 the abandonment of the Montebello facility, and
- 10 the other is a shifting of some cushion gas from
- 11 Aliso Canyon and La Goleta to working gas.
- 12 Those two systems will immediately put
- 13 in between 24 -- well, one of them will provide 14
- 14 billion cubic feet per day, or billion cubic feet
- of additional available storage in basin already.
- 16 Doesn't have to come across the barrier, or across
- the system, it's already there.
- 18 And then at Montebello there's at least
- 10 billion cubic feet that could be brought in
- quickly. And there's a total of 24 billion cubic
- 21 feet.
- So when you put all this together, plus
- 23 SoCalGas is way ahead on where we anticipated they
- 24 would be for putting gas in storage this year,
- 25 things are looking very good for SoCal.

1	And with your question with regards to
2	slack capacity, given the situation this summer
3	it's going to be interesting to see what happens
4	as SoCal tops off its storage facilities. And
5	depending upon how weather goes through this
6	coming next month, the end of June and through
7	July, they could be very close to topping off
8	their facilities, because they've been putting in
9	500 to 900 million cubic feet per day into
10	storage.
11	And it will be interesting to see what
12	kind of impacts that will have on prices at the
13	California border, because that need for gas to
14	put into storage will be abated. Though, if gas
15	demand increases as normal during the August
16	timeframe, that capacity may very well be needed
17	for power generation.
18	But, again, they will then have time
19	during September, October, to recoup any gas they
20	need to pull out of storage.
21	COMMISSIONER WOOD: And I note from
22	discussions with President Lynch awhile back, that
23	there are storage rights in the SoCalGas system
24	that some of the noncore customers have.
25	Can those be when you talk about kind

- of topping off the storage system for SoCalGas,
- 2 does that include that that capacity would also be
- 3 filled up?
- 4 MS. HORNER: I think I can answer that.
- 5 Under PUC rules, SoCalGas needs to have about 70
- 6 billion cubic feet of gas injected into storage
- 7 for their core customers. Those are the customers
- 8 that they buy gas for.
- 9 And the remaining 35 Bcf of capacity
- 10 that they have is available to noncore customers.
- 11 And they're very close, as Bill said, to filling,
- to meeting the 70 Bcf requirement right now.
- 13 And as I mentioned earlier, a number of
- 14 years ago the state made available to some of the
- 15 noncore customers, including electric generators,
- the ability to, you know, manage their own
- 17 storage. So they don't have an amount of storage
- 18 that's assigned to them that they have to fill,
- 19 like the core does.
- 20 And so that is one of the things we're
- 21 looking at, is they have that flexibility. But
- 22 it's an asset that we want to be sure that they
- use. Because, as we have now seen, it really
- 24 helps the state, not just from a gas perspective,
- from an electricity reliability perspective, if

- noncore customers, as well as core customers, have
 some gas in the ground for when they're really
- 3 going to need it.
- 4 COMMISSIONER WOOD: Does SoCalGas have
- 5 the ability or have the tariff authority to allow
- 6 another party to interrupt, or to have secondary
- 7 rights to store if it's not being used by the
- 8 primary rights holder? Like interruptible storage
- 9 service, or -- so in other words, we can get it
- 10 filled by somebody.
- 11 And then if the firm rights holder,
- 12 whether that's an electric generator or some other
- 13 noncore customer comes in and uses it, then that
- 14 would just displace that interruptible person who
- 15 parked his gas there for a month or two, or week
- or two.
- 17 Is that -- I know we've got some firm
- 18 tariffs that do that on interstate storage. I was
- 19 wondering if that was available under the SoCalGas
- 20 tariffs.
- 21 COMMISSIONER LYNCH: We're certainly
- 22 analyzing that question.
- 23 COMMISSIONER WOOD: Okay, I mean I know
- 24 you and I have talked about that before. And kind
- of like, if you're going to squat on your rights

- 1 and somebody else might use them, because you're
- 2 right, that storage is a very valuable resource
- 3 and can be --
- 4 MS. HORNER: Exactly, and we have been
- 5 encouraging SoCalGas to use their capacity in a
- 6 way that they can just maximize it. So, you know,
- 7 I don't think they're going to stop when they get
- 8 to 70.
- 9 And they do have the ability, under
- their tariffs, to sell gas to noncore users
- 11 through hub services, basically. And they do that
- 12 all the time.
- But what we saw last winter was that
- 14 going into the winter season they sold quite a bit
- of gas, of stored gas, through hub services to
- 16 noncore users. And then they ended up entering
- 17 the winter with a bit less gas than historically
- 18 they would. And that's a situation we'd like to
- 19 avoid again.
- 20 So, that's why we hope they won't stop
- 21 at 70.
- 22 COMMISSIONER LYNCH: And that compounded
- 23 by a lot of the noncore customers last winter
- 24 requested core elect treatment when the gas price
- 25 rose so high, including some of the cities that

- were caught unaware and had to cut city services.
- 2 So, that was something that I think the
- 3 noncore customers hadn't bet on, and I'm hoping
- 4 that the noncore customers are going to be taking
- 5 a look at their options. But doing that in real
- 6 time, rather than in planned time, is really the
- 7 problem there.
- 8 And so looking at the whole picture,
- 9 both core and noncore, we would hope to work with
- 10 the FERC on making sure that there's enough for
- 11 everyone. Because we can certainly expand our
- 12 system and work with the utilities to cover the
- 13 core.
- 14 But then, for some of those key noncore
- 15 customers, especially the electric generators, I
- 16 really think we're going to need some federal/
- 17 state cooperation.
- 18 COMMISSIONER WOOD: And that really
- 19 would reach to their ability to get from the
- 20 California border up the interstate pipelines to a
- 21 gas source like San Juan or Baja, or one of the
- hubs?
- 23 COMMISSIONER LYNCH: It could be that,
- 24 and it could be providing appropriate
- 25 encouragement in terms of hedging strategies.

1	MS. HORNER: I have just one final slide
2	that I won't go through all the points. It's
3	basically some facts about what we're all we're
4	trying to do to maximize our resources in-state.
5	Some of which Bill touched upon, in our own gas
6	production and our own stored gas.
7	But, Commissioner Wood, you had
8	mentioned earlier what can the FERC do. And we
9	appreciate your fast action and your commitment to
L 0	look quickly at new interstate pipelines serving
11	California, and as you know, we're actively
L 2	participating in a couple of cases before your
L 3	agency.
L 4	But, one thing I think that you can do
L 5	is to help us have access to information, as well.
L 6	We're looking forward to working with you and
L 7	getting information about what's going on on the
L 8	interstate pipelines. I think that will help, if
19	we work in partnership to look at that
20	information.
21	That will help us in our planning
22	efforts, as well, to plan for California's energy
23	infrastructure.
2.4	COMMISSIONER WOOD: Well I certainly am

personally committed to that, and we'll work with

- our colleagues at the Commission to get our

 partnership back on track, and get going forward

 in the matters.

 It is different with a Hinshaw regulated
- state that, you know, we don't really regulate it
 right down to the citygate, as we do in Illinois
 or Indiana and some other states, to really
 balance that jurisdiction with our sister state
 agency, so.
- 10 MS. HORNER: Yeah, all the more important to work together.
- 12 COMMISSIONER WOOD: Amen.
- MS. HORNER: Thank you.

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- 14 COMMISSIONER BROWNELL: And I think we
 15 appreciate the need to share resources wherever
 16 appropriate and possible. And frankly, to the
 17 extent that we can ask for information in similar
 18 ways, it reduces the burden on the reporting
 19 business who, after all, have other things that
 20 they need to do than report to agencies.
 - I think it's critically important that
 we also commit to, and I know you do and we do, as
 well, but respect the confidentiality of some of
 the material that are indeed proprietary to
 business interests.

- So, we do look forward to enhancing that 1 2 partnership. 3 MS. HORNER: Great, thank you. COMMISSIONER LYNCH: Thank you. 4 5 PRESIDING MEMBER MOORE: Thank you. Commissioners, we've asked some members of the Legislative Staff to come over and give a very 8 short briefing on legislative intentions and 9 directions during the year. 10 Mr. Wiley, if you'd like to introduce 11 your colleagues. They have some presentations they'd like to make to you. And then we'll follow 12 13 that up with private industry. MR. WILEY: Well, welcome, good 14 15 afternoon and welcome to California. I'm Kip 16 Wiley with the Senate Office of Research. With me
- Commissioner Moore asked me to give you

 some legislative perspectives on the natural gas

 issue. I have to preface that by saying that we

 have 120 members in the Legislature with two

 Houses and two Parties. So this is a sense of the

 Legislature's perspective. It's ever-changing.

Office of Research.

today is Lawrence Lingbloom with the Senate Energy

Committee, and Anna Ferrera, also with the Senate

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1	I think one of the most
2	COMMISSIONER BROWNELL: Good hedging
3	strategy there.
4	MR. WILEY: Yes. I think one of the
5	most important things that members are dealing
6	with right now is the issue of price. And it's
7	been noted by both the PUC and the Energy
8	Commission.
9	While many members believe the supply
10	and demand imbalance is part of the reason for
11	price volatility in California, we have some
12	members who also believe that there has been some
13	manipulation of the market, especially at the
14	southern California border.
15	We understand that the Federal Energy
16	Regulatory Commission has before it a review of
17	this issue. And we look forward to your work on
18	this item.
19	With more than 90 percent of the power
20	plants coming on line in California over the next
21	few years being gas fired, it's important to
22	California that both the Federal Energy Regulatory
23	Commission and our PUC monitor the natural gas
24	market in and around California.
25	Where prices are not just and

1	reasonable, we believe FERC should be able to
2	respond in an appropriate and timely manner with
3	various mitigation measures, and where necessary,
4	or if necessary, order refunds for excessive
5	pricing.
6	I want to briefly talk to you about some
7	of the things the Legislature has recently done,
8	and a couple items maybe on where we might be
9	going.
10	While the Federal Energy Regulatory
11	Commission has the sole jurisdiction over
12	enforcement of just and reasonable wholesale rates
13	for non-utility providers of natural gas, the
14	state can play an important role in addressing the
15	supply and demand imbalance.
16	Just recently, the Legislature adjourned
17	its first extraordinary session, and passed, and
18	the Governor signed into law, Senate Bill 6 by the
19	Senate Pro Tem John Burton, which established a
20	new State Power Authority to invest in both
21	electric generation capacity and needed gas
22	storage and transportation infrastructure.
23	Specifically, with respect to natural
24	gas, the bill requires the PUC and the Energy

Commission to prepare and submit to the Authority

1	and the Legislature, a report on necessary
2	improvements to the state's natural gas storage
3	and transportation system. And to insure the
4	provision of adequate seasonably reliable and
5	competitively priced amounts of natural gas to
6	consumers.

The bill also authorized the Authority to participate in the financing of those needed infrastructure improvements. That will go into effect, I believe, September. So they're gearing up for it now, and that Authority will be able to start taking action this coming September.

As a hedge against natural gas price volatility, the Legislature may consider this year, in the second extraordinary session, the implementation of a renewable portfolio standard.

The goal of the standard would be to require retail providers of electricity to include renewable resources in their supply portfolio.

The standard would push the state to a 20 percent renewable supply by 2010. Today our renewable resources make up about 12 percent of the state's supply.

While the California PUC approves storage requirements for gas utilities to serve

1	core customers, storage requirements for noncore
2	customers have been deregulated. Perhaps it might
3	be appropriate for the Federal Energy Regulatory
4	Commission to work with our Public Utilities
5	Commission to determine whether storage
6	requirements might be appropriate for unregulated
7	generators and suppliers.
8	Because California imports about 85
9	percent of its natural gas needs, the state must
10	be cognizant of what has happened to supply and
11	demand in the regions that our supplies come from.
12	Perhaps the Federal Energy Regulatory Commission,
13	in concert with our Energy Commission, could help
14	California develop a collaborative energy supply
15	and demand forecasting effort with other western
16	regional state and Canada and Mexico.
17	Those are some of the items that the
18	Legislature is looking at and discussing. I think
19	I'd like to have Mr. Lingbloom talk from the
20	Committee's perspective.
21	MR. LINGBLOOM: Hi, Commissioners,
22	welcome. I'm Lawrence Lingbloom; I'm staff to
23	Senator Debra Bowen, Chairwoman of the Senate
24	Energy Utilities and Communications Committee.

I just wanted to briefly underscore the

1	extent	to	which	jus	t and	l rea	asonable	ele	ectr	icity
2	prices	now	relv	on	iust	and	reasonab	ole	qas	prices

The FERC has adopted an order last week

which appears to eliminate a lot of the potential

loopholes or opportunities for gaming. And that's

very encouraging.

At the same time, the effect of the FERC order on consumers, the extent to which end-use consumers rates are, in fact, just and reasonable now relies very heavily on whether the gas indices that go into the proxy price are accurate and legitimate, legitimately reflecting the costs that a marginal unit would pay.

And so I wanted to emphasize the importance of that; and we're encouraged by your investigations related to gas transportation issues and addressing some of the potential for manipulation in that market.

And I think we've sort of begun to back ourselves back to that source and really want to encourage you to pursue effective oversight of that issue.

COMMISSIONER WOOD: One of the things,

Mr. Lingbloom, that parties have said, not

necessarily me, but people in the Commission

1	probably before I got there, about the prices at
2	the border being higher here than elsewhere, is
3	that that reflects a scarcity rent, or scarcity
4	premium for the ability to get gas to the end user
5	in California that doesn't exist in Chicago or
6	Provo or somewhere else.
7	What's your take on that? I mean
8	obviously from the points you make you've thought
9	about this stuff, but how do we how do you kind
10	of pierce through that and make sense of it?
11	MR. LINGBLOOM: Well, I think the
12	assertion of scarcity rents is tricky, because, of
13	course, that can be used to excuse any price
14	charge virtually.
15	I think that we're encouraged by your
16	statements related to sort of disassembling the
17	components of the price and going from wellhead
18	price and then looking at legitimate
19	transportation costs. And you know, you can
20	consider take-away capacity and other issues that
21	are going to produce a legitimate price at the
22	border.
23	I think first you've got to identify
24	those components. Then look at what the

legitimate price is. And then make a judgment

2	I	think	that	the	prices	that	we've	

about how much scarcity rent exactly is warranted.

- 3 observed in the past year at the southern
- 4 California border, the costs that might be
- 5 attributed to scarcity rent is clearly
- 6 unreasonable. And it's just simply unsustainable.
- 7 COMMISSIONER BROWNELL: I appreciate
- 8 your comments, and we share and understand the
- 9 concerns about what is appropriate pricing or not.
- 10 But, are you suggesting that the constraints or
- 11 congestion at the border, which I think the report
- 12 also acknowledges, are not really much of a
- 13 factor? That there are really other things going
- 14 on?

- 15 I understand you think there are other
- 16 things going on. But are you concerned about that
- 17 infrastructure limitation at the border? Is that
- 18 something that the Committee has talked about?
- MR. LINGBLOOM: Absolutely. Our
- 20 Committee has not taken that up formally, but that
- 21 is a concern. And I think those infrastructure
- issues are a concern in terms of reliability, as
- 23 well as price. And we have every interest in
- 24 addressing those.
- 25 COMMISSIONER WOOD: Does this problem, I

1	asked Mr. Wood like your name the same
2	question from the Energy Commission Staff angle,
3	but do these problems of the price, the scarcity
4	rent and all that, go away when there's
5	sufficiency of both inter- and intrastate capacity
6	and storage?
7	MR. LINGBLOOM: Well, I think that's a
8	very good question. In theory, they do. And I
9	think
10	COMMISSIONER WOOD: Because we don't
11	really see this anywhere else in the country.
12	Most everywhere else in the country is perceived
13	to have at least some slack capacity on their gas
14	system.
15	Yet we come out here where there's take-
16	away limitations, as the Commission report has
17	noted, and you know, tariff issues, as was
18	reported from folks from the California Commission
19	that are still being worked through.
20	And I just wondered if those fixes are
21	in place, and they get resolved in the near

future, should we expect then the price to return
to where it is elsewhere in the country where
there is some slack capacity?

MR. LINGBLOOM: Well, to the extent I

1	can predict the future, I would expect that they
2	would. Again, it depends on how much of the price
3	is attributed to those physical issues, as opposed
4	to artifacts of the market.
5	COMMISSIONER WOOD: Has the Committee
6	gotten any evidence from other parts of the
7	country where the artifacts of the market are
8	still kind of skewing natural gas delivery prices?
9	MR. LINGBLOOM: I don't have anything
10	specific on that.
11	COMMISSIONER WOOD: I mean I'm looking.
12	If you all hear them send them my way, because
13	we that's a big issue for us, too. Make sure
14	that we really have a very competitive natural gas
15	infrastructure from coast to coast. And right
16	here is where it ain't working.
17	MR. LINGBLOOM: Yeah, well, I think from
18	at least a casual review of observed prices around
19	the country, the southern California border
20	obviously sticks out as a very huge sore thumb.
21	COMMISSIONER BROWNELL: Thank you.
22	MR. LINGBLOOM: Thank you.
23	COMMISSIONER WOOD: Thanks a lot.

COMMISSIONER BROWNELL: I actually just

25 have -- I thought maybe there was another

- 1 presentation. Could you say more about your goal
- in renewable energies and what you're doing to
- 3 incent that.
- I know a lot of the public purpose
- 5 dollars go towards that. We believe that those
- 6 new technologies are really the answer to a lot of
- 7 issues.
- 8 But I'd like to hear about the emergence
- 9 of some of those new technologies; what investment
- 10 you're seeing, whether by private companies or the
- 11 state. And kind of, I think the Governor's even
- mentioned you plan to be a showcase for new
- 13 technologies. Actually the Pennsylvania Governor
- 14 thinks so, too. And I think the Texas Governor
- thinks so, too.
- 16 But we'd like to hear what you're doing.
- 17 We're interested in technology, both in terms of
- 18 generating capacity, as well as demand side
- 19 management.
- 20 PRESIDING MEMBER MOORE: Well, in terms
- of a slow pitch that's a good one for this
- 22 Commission because our record in renewable energy
- has been stellar.
- 24 We've put over 1000 megawatts of new
- 25 permitted capacity through our renewable program

- 1 in every single technology that's out there that
- 2 responded to our new auction on line.
- 3 We've got another 1000 megawatts that
- 4 will probably come on line as a result of the next
- 5 auction that we're conducting.
- 6 So, in terms of expanding our capacity,
- 7 I would have to say, and I'll preface this by
- 8 saying there are at least a couple of different
- 9 approaches about whether or not we will need,
- should need a portfolio standard.
- 11 We opted to not have a portfolio
- 12 standard. We opted for a market-based solution to
- 13 the renewable issue, and it worked. And, frankly,
- it is continuing to work.
- So, if you look at the best technologies
- 16 that we've had in performance in California, wind
- 17 clearly. It's taking 60 or so percent of the new
- dollars that we're generating for investment.
- 19 Biomass is coming in pretty strongly.
- 20 We've got a strong contingent of geothermal with
- 21 almost 370 new megawatts coming on in Salton Sea,
- 22 a geothermal.
- So I would say that our ability to
- 24 provide an incentive for the market to respond has
- 25 been very well received. We are spending, by the

- 1 way, we spent \$540 million, or committed that,
- 2 over the four-year transition period in the
- 3 renewables program.
- 4 The new investment plan, which was
- 5 approved out of my Committee, actually, and
- finally the Commission two weeks ago sets aside
- 7 \$135 million annually for ten years to provide
- 8 incentives for new renewable technology.
- 9 The Legislature has begun hearing a
- 10 request to talk about, and I don't know what
- 11 action they'll take, a new renewable portfolio
- 12 standard. I'm not sure where the money would come
- from for it, but at this point we are using
- 14 ratepayer dollars to pay for the existing program
- 15 that is run out of this house. And my guess is
- 16 that we'd have to find an additional ratepayer
- 17 support for it.
- I don't know that we're going to be able
- 19 to exceed the rate that we're bring renewables on
- 20 line, but we certainly have seen them as a growing
- 21 part. We're at about 12 percent of the total load
- in terms of renewables.
- COMMISSIONER WOOD: So is that 12
- 24 percent like on a peak day, 12 percent is coming
- from renewables?

1	PRESIDING MEMBER MOORE: On a peak day
2	we can get up to 12 percent of the load if
3	everything's on line. We have had a tad of a
4	problem with our QF contracts in the past months,
5	so there's been I think of that as a hiccough,
6	and I hope that that's what it turns out to be.
7	But, in the meantime, as we overcome
8	that, we can have that capability, I think we'll
9	end up with perhaps 18 percent in the end. It's
10	probably a reasonable goal at the end of the
11	program, and probably achievable.
12	COMMISSIONER BROWNELL: One of the
13	issues, Michal, that we're talking about at the
14	FERC and with various states is interconnection
15	standards.
16	Some of the new technologies have found
17	it challenging to respond to that. What's your
18	experience? Do we need national interconnection
19	or regional interconnection standards?
20	PRESIDING MEMBER MOORE: Well,
21	personally I wouldn't mind a national standard. I
22	wouldn't mind having the FERC take the lead on
23	that, and it would make my job a lot easier to
24	have something like that come down.

Nora, you asked what was my experience

- with it. The experience, at least in terms of

 trying to get some of the more remote projects on

 line, and then have them running, has been just
- 4 dismal.

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- If I look out to some of the places

 where I would have been able to incent, in fact

 made awards to new renewable technologies, only to

 have them come back and say, Michal, I can't bring

 it on because a) I can't get the interconnect

 agreement, or b) the transmission facility that I

 want to pipe up to is congested, can't get it

 over.
- In terms of some of the really promising

 potential that we've got for cooperation with

 Mexico, for instance, our ability is constrained

 because of the access lines across the border, and

 then frankly, the transfer along the border.
 - So, if we could find a way to standardize the interconnection standard, it would take us tremendously forward in renewables.
 - And two, if we can imagine some of the capacity constraints, and I've mentioned this in some of my public statements before, I would be willing to look at using some of the renewable fund that we control here, and use it as a set-

- aside, if what it accomplished was to bring
- 2 renewable technologies access into the big lines.
- 3 So, I'd be willing to change the rules a
- 4 little bit as we've seen them now, and provide a
- 5 certain portion of the money that we've already
- 6 allocated, to pull it back and say, you can get a
- 7 bonus for your application if, indeed, you can
- 8 show us that this bonus money would allow you to
- 9 tie into the bigger lines.
- 10 So, we've got the opportunity to break
- down the monoculture a little bit by using this.
- 12 And there may be a response on the legislative
- side, I'll be curious to hear, myself, because I
- haven't formally heard what they're undertaking on
- 15 the RPS side.
- 16 MS. FERRERA: I would only like to add
- 17 that as far as renewables I think the Legislature
- is very concerned about trying to see if we can
- 19 take lemons and make lemonade out of some of the
- 20 horrible things that have happened over the last
- 21 year.
- 22 And I think that one of the things that
- 23 we were able to say over time was that this was a
- 24 challenge and opportunity. And I think that we
- were also looking at renewables.

1	Unfortunately, in our concern over
2	keeping the lights on and making sure that we had
3	contracts locked up, I think now is the time that
4	we're looking at trying to go back maybe with a
5	renewable standard to make sure that that's part
6	of, an integral part of our portfolio.
7	And we did renew the public goods charge
8	last year. We feel, you know, it was something we
9	were very proud of accomplishing for ten years
10	going forward. And at this point I think it's
11	very important that we take a look at diversifying
12	the portfolio for the state.
13	So, we'll be looking at that.
14	COMMISSIONER BROWNELL: I would
15	encourage you, as I know my colleague would, as
16	well, to certainly be looking at renewable
17	technologies. But there are a lot of other
18	technologies that are going to enhance the
19	situation, both in terms of capacity and
20	environmental issues, in your state and others.
21	And the benefit of markets is that those
22	new technologies have an opportunity to enter
23	quickly.
24	So, you might want to take a look at
25	those, too, because there's lots of exciting

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1 things happening, both in generation and to some
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- 2 extent in transmission.
- 3 COMMISSIONER WOOD: And on the demand
- 4 reduction side. I mean certainly --
- 5 COMMISSIONER BROWNELL: Right.
- 6 COMMISSIONER WOOD: -- your state's
- 7 taken a worldwide lead on that, and I'm impressed
- 8 with that.
- 9 One of the things that kind of on point,
- 10 California was going so strongly toward a very pro
- 11 distributed generation, small scale, even
- 12 microturbines policy before I think we all got
- 13 distracted on really the events of last summer,
- and I, in my former job, got a chance to really
- 15 work closely with the people that helped develop a
- lot of what California got on DG.
- 17 And would hope to see you all get back
- in the saddle on that effort. Because when she
- talks new technologies, that's I think are these
- 20 small scale new generation plants that really
- 21 decentralize the market power, and the power power
- of the current generation fleet.
- So, it's a real silver bullet for
- everybody in this country.
- 25 MS. FERRERA: I agree. I think

- 1 unfortunately, you know, now that we're in this
- 2 situation with debt, it's unfortunate that now the
- 3 way that we're looking at distributed generation
- 4 is whether or not, if folks get off the system
- 5 whether or not we can pay and cover all the debt.
- 6 So, I agree, we were heading in that
- 7 direction. And hopefully we'll be able to move
- 8 things back on track.
- 9 COMMISSIONER WOOD: Keep up the good
- 10 work.
- 11 PRESIDING MEMBER MOORE: Thank you.
- 12 Commissioners, in the interests of time, because I
- know that we're on a little bit of a tight
- schedule at the out end of 5:00, so I have three
- presenters who would like to give you a
- 16 prospective on various elements of the gas world
- out there.
- 18 And I'm going to ask them to spend about
- 19 ten minutes apiece with you. And then,
- 20 Commissioner, I'm going to turn it back to you,
- 21 and obviously what you choose to do at that point
- is certainly --
- 23 COMMISSIONER BROWNELL: We'll try not to
- 24 be quite so curious.
- 25 PRESIDING MEMBER MOORE: No, au contre.

1	COMMISSIONER BROWNELL: Or maybe we can
2	come back and continue the dialogue.
3	PRESIDING MEMBER MOORE: We'll have you
4	back for as many forums as you can stand.
5	Dan Thomas is here from PG&E, and I'm
6	going to ask Dan to make a presentation for you.
7	And he will be followed by Phil Davies and Michael
8	Day with the Wild Goose Storage Facility. And Ron
9	Walter and Craig Chancellor from Calpine will wrap
10	it up.
11	So, Dan, the floor is yours.
12	MR. THOMAS: Thank you. This is a
13	rather lengthy presentation but I'll just do
14	selected slides.
15	My role at PG&E is to basically market
16	our transportation and storage services with our
17	gas transmission business unit. As well as look
18	at the future needs for expansions to insure that
19	the customers are served by our system.
20	If you could turn to page 3, essentially
21	the system we operate serves both northern and
22	southern California. We do have a significant
23	market for Canadian gas that we deliver into I

should say actually California gas, as well, into

24

southern California.

1	Because of the high prices we've all
2	seen that's been actually the most attractive
3	market since about last November.
4	We do operate unbundled system, much
5	like FERC. We unbundled it back in 1998 through a
6	settlement that we had at the Commission. And
7	essentially we do offer the same type of services
8	that FERC basically operates, firm transportation
9	rights; secondary rights on a system.
L 0	And it's to be contrasted with Southern
11	California Gas and San Diego. They're currently
L 2	completely bundled. And so we do have two very
L 3	different systems within the state.
L 4	And if there is one encouragement I
L 5	would make is that the PUC kind of do unbundle
L 6	that system, as well.
L 7	We currently are conducting an open
L 8	season for capacity that we do have. We have
L 9	contracts that expire in 2003, and we're
2 0	conducting an open season to see if people are
21	interested in taking contract service for up to 15
22	years.
23	We do have an application in front of
2 4	the Commission to look at the rules right now.

And as part of that we're also asking customers to

1	see if they want our system to be expanded from
2	where it is today. We are actually in the process
3	of expanding, we call it our Redwood, or the
4	system we have coming down with Canadian gas, by
5	roughly 200 million a day. And we're asking
6	shippers if they want the system to be expanded

And I'll go into some further materials

as we kind of look at the overall picture. If you

turn to page 7, which is the map I think

Commissioner Moore was looking for.

further as part of that.

And it indicates all the pipelines that do serve southern California and our system.

We're served by PG&E Northwest, Kern River, El

Paso and Transwestern.

If you turn to page 10, just in the interests of time, and again we do offer a contract structure just like FERC. And we're hooked up to the pipelines. We have the same nomination systems and so we can match basically nominations each and every day.

And we do offer a bit more flexibility than FERC does, because we also do offer, besides SFV, we offer MFV transportation rates, as well, for firm transportation services. And, as-

- 1 available, which is the interruptible services
- 2 that FERC would offer.
- 3 COMMISSIONER WOOD: Is that also, Mr.
- 4 Thomas, on the storage aspect or is that a
- 5 separate?
- 6 MR. THOMAS: No, we also offer a
- 7 storage, we have firm rights at our storage
- 8 system. And I think in response to a question
- 9 earlier from you, we also do offer an
- 10 interruptible service. It is a way, basically, to
- fill storage in those times when basically
- 12 somebody else who has a firm right is not using
- 13 it.
- 14 And so each and every day we actually
- 15 have people who will inject gas into our system,
- or take it away on an interruptible basis on
- 17 storage.
- 18 And Southern California basically
- operates in the same manner.
- 20 COMMISSIONER WOOD: So they do have
- 21 interruptible storage rights there, as well?
- MR. THOMAS: Right.
- Turning to page 14, which is really our
- system send-out in the year 2000. And we served
- almost 2.7 Bcf of gas deliveries during that year.

- 1 And with about 11 percent being served into
- 2 southern California.

continues to grow.

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- And the largest market that we have
 right now is for power gen. In 2001 that overall
 demand is projected to increase to roughly 3, Bcf
 with almost the entirety of the increase in the
 power gen sector. So it's a big market and
- 9 Page 15 just highlights kind of the
 10 monthly figures. The top bar is basically the
 11 firm rights that we can offer with the capacity
 12 that we have on our system.
- 13 And the white in between the bars tends
 14 to be the excess or slack capacity that was not
 15 used during that time, or is forecasted not to be
 16 used during that time.
- 17 And this takes into account gas coming
 18 in from the Southwest, as well as gas coming from
 19 Canada.
 - And you can see all of last year we had slack capacity. In some cases probably close to 25 percent. And we saw the big price run-up starting to occur in November of last year. And even during that time we still had slack capacity.
- 25 But since we're very tied into southern

- 1 California at Topock, essentially Topock
- 2 essentially represents the pricing point in many
- 3 respects for all short-term supplies into
- 4 California. Because that tends to be the marginal
- 5 resource for our system.
- I'll be very careful not to basically
- 7 advocate positions back there because we are one
- 8 of the prime movers asking the Commission to look
- 9 at certain pricing issues.
- 10 COMMISSIONER WOOD: She's got a
- 11 transcript, so, we'll just file it in the record.
- 12 MR. THOMAS: Page 16, essentially as we
- look forward what we show here is kind of our
- 14 electric generation market up through this year,
- both on a real basis, as well as a forecast basis.
- 16 And as you can see there's a solid blue
- 17 line down there. On average, historical average
- is about 700 million a day for electric
- generation. And in a dry year that's gone as high
- as 900; in a very wet year that's gone below,
- 21 close to about 430, 450.
- 22 And this takes into account hydro
- 23 conditions both in California and more
- 24 importantly, in the Pacific Northwest. Because we
- import so much power in a very wet year.

1	Now, looking forward, look at this year,
2	we're looking at close to almost 1.25 Bcf of
3	electric generation requirements in our market,
4	which we have never ever seen before.
5	And, of course, Pacific Northwest has
6	the highest either the driest or the second
7	driest hydro conditions on record.
8	And going forward, we've done a lot of
9	analysis and taking out let's say the driest year
10	of the Pacific Northwest, we are seeing that the
11	conditions, we believe, will kind of vary between
12	roughly 700 million a day upwards to about 1.1 Bcf
13	of requirements for electric gen.
14	That takes into account the new
15	generation, takes into account the fact that a lot
16	of new gen is heat rates around 7000, 7500. We
17	believe that the less efficient units will be
18	retired or replaced over time, that the volatility
19	will basically continue to be there.
20	And we need to insure that we plan, not
21	on an average hydro year not really a cold year
22	basis, but we believe we need to take some of the
23	highest conditions that we see and build to
24	basically that level to insure that even in those

peak hydro conditions that the market has excess

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1 capacity. And it's something we're going to be
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- 2 pursuing with the Commission.
- 3 COMMISSIONER WOOD: Well, it's
- 4 refreshing to hear -- and you are from the
- 5 regulated pipeline side, right?
- 6 MR. THOMAS: That's correct.
- 7 COMMISSIONER WOOD: Does the other
- 8 pipeline in the state share that same view?
- 9 Because from --
- 10 MR. THOMAS: Well, I think the other
- 11 pipelines, at least -- you mean in California?
- 12 COMMISSIONER WOOD: Yes.
- MR. THOMAS: This is, I think, a
- 14 difference that we've had actually with our
- friends in the south. We tend to want to build to
- 16 a different standard than they want to build to.
- 17 And it's something that the Commission's going to
- 18 have to kind of iron out, put guidelines in place,
- not just for PG&E, but for the state.
- 20 COMMISSIONER WOOD: But, I mean are you
- 21 comfortable with the Commission's revenue recovery
- 22 policy on your pipeline that you would feel
- 23 comfortable advocating kind of over-building
- 24 and --
- MR. THOMAS: That's --

1	COMMISSIONER WOOD: because you're
2	allowed to recover that through your regulated
3	rates?
4	MR. THOMAS: That's correct.
5	COMMISSIONER WOOD: Do you have bypass
6	as much as the southern California has that
7	threat?
8	MR. THOMAS: Well, we have we also
9	serve markets both in southern California, but
10	also in the Bakersfield area where there are
11	actually other pipelines. There's at least three
12	proposals now to kind of build in northern
13	California, and so we do have potential bypass
14	issues.
15	We have California gas production that
16	actually generally is delivering into our system,
17	but also can be delivered into an industrial
18	customer. And so that is a real bypass threat for
19	us.
20	We don't have the same existing tariff
21	issues that the tariff that Southern California
22	Gas has, we don't have that in northern
23	California.
24	COMMISSIONER WOOD: What would explain
25	the difference between the price you get at the

1	Malin delivery point, and I mean there is,
2	although it's not as pronounced as the Topock,
3	there still is a markup that tends to happen from
4	the Canadian production basins to the border.
5	And what would you say would kind of
6	explain that spread?
7	MR. THOMAS: Well, first of all, when
8	you look at a lot of the information from the
9	publication Gas Daily, et al, the problem you
10	always ask, you have to ask yourself how much gas
11	is being traded at that point.
12	And it's very thinly traded. Sometimes
13	we call up and you might get one or two packages
14	basically setting that price. Where you'll have
15	10s and 50 and 100 packages
16	COMMISSIONER WOOD: Let's say use the
17	mid point, even the mid points are higher, though,
18	aren't they?
19	MR. THOMAS: Correct. And the other
20	issue is, I think just like any good marketer, you
21	basically try to set your price. If you hold a
22	capacity and you basically have supply you want to
23	basically sell into the market, you're looking for

25 And for California and for us the

where is that marginal resource.

- 1 marginal resource is Topock. And so that's why
- 2 you actually do see a price differential between
- 3 Topock and Malin. And you also can look at
- 4 differences between Topock PG&E and Topock
- 5 southern California.
- 6 And generally southern California has
- 7 been I want to say \$1, \$2, \$5, \$10 higher than
- 8 deliveries into northern California.
- 9 And, again, those are issues that we
- 10 have been advocating the FERC take a look at.
- And with that, there's more material
- 12 here. I'll be glad to talk to either one of you
- if you have further questions.
- 14 COMMISSIONER WOOD: I'm fascinated by
- 15 this chart on page 16. So really from last summer
- 16 to this coming summer, so from '99 to '01, the
- 17 PG&E system saw basically almost a doubling from
- 18 700 MMcf a day to 1.3 billion?
- 19 MR. THOMAS: Last year -- you have to
- 20 take it actually up a little bit further because
- 21 last year was close to probably about 900 a day.
- 22 But we essentially saw almost a 35 percent --
- COMMISSIONER WOOD: I'm sorry, I'm
- 24 thinking '99 --
- 25 MR. THOMAS: -- increase in generation.

1	COMMISSIONER WOOD: I'm thinking a
2	two-year period, so the '99 was 700, last year was
3	900-and-something, this present year's 1.3?
4	MR. THOMAS: That's correct. We've seen
5	some just tremendous increases in generation.
6	COMMISSIONER WOOD: Is there sufficient
7	slack capacity in the PG&E system aggregated to
8	handle that basic doubling of volume?
9	MR. THOMAS: We have sufficient capacity
10	to handle the 1.3 level. And today we're actually
11	burning about delivering about 1.2 into the
12	fossil power plants. And we still have slack
13	capacity on the system even as we speak today.
14	COMMISSIONER WOOD: And so your advocacy
15	of expansions then would reflect the need for just
16	that power gen growth?
17	MR. THOMAS: Well, I think what we need
18	to plan for is to insure that this higher level is
19	met. And so we'll be advocating basically to
20	expand our system.
21	We already have one expansion, roughly
22	200 million a day. And we'll be advocating to
23	expand the system probably another 100 to 150 on
24	top of that at a minimum

COMMISSIONER WOOD: But you say you are

- 1 handling the 1.2 today fine, is that right?
- 2 MR. THOMAS: Right. That's today. But
- 3 we also see growth in our core demand. We also
- 4 see growth in what we call non-core, non-UEG
- demand, as well. And so it pushes us up.
- 6 COMMISSIONER WOOD: So, again, just help
- 7 me out here. What do you think is causing, even
- 8 though your markup at Malin is lower than it is at
- 9 Topock, what's causing that price at the border,
- 10 the northern border of California, to be in excess
- of hub price plus transportation rates?
- MR. THOMAS: Well, I still think you
- have to look at the Topock prices.
- 14 COMMISSIONER WOOD: Because it always --
- 15 MR. THOMAS: And that's where prices are
- driven in California.
- 17 COMMISSIONER WOOD: And so they do
- 18 reflect back to the Malin price, as well. Why
- don't they replicate further than just California,
- 20 though?
- 21 MR. THOMAS: We've not looked at that.
- 22 I don't know. You got high demand in California
- obviously. We've seen prices come off
- 24 dramatically since June 1st. And we don't know --
- 25 we're not sure what that's a reflection of.

1	COMMISSIONER BROWNELL: Earlier in your
2	presentation you referenced the difference between
3	this kind of operating principles that you have
4	and those in the southern part of the state, and
5	suggested that some reconciliation of those would
6	be, or the adoption would be a goal of yours.
7	That's certainly a California Commission
8	issue, but tell us what you think the impact of
9	that would be if you brought consistency? And,
10	Trina, if you want to comment, that's fine. I
11	don't want to leave you out.
12	MR. THOMAS: Well, one of the issues
13	that we see we believe, there are a number of
14	issues causing high prices, but one of them is the
15	fact that when you schedule gas on a daily basis,
16	for us people who hold firm transportation could
17	hook up to somebody having firm transportation on
18	the interstates, and there's a daily matching of
19	that.
20	What we face every day is gas moved into
21	southern California through what we call Wheeler
22	Ridge is, there's a windowing process that occurs.
23	And
24	COMMISSIONER WOOD: A windowing?
25	MR. THOMAS: It's called a windowing

But they basically, let's say at the first of the
month everybody can nom whatever you want to nom
into that system. I think it was back on May 1st

process. It's a Southern California Gas term.

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- they had noms in excess of 6 tcf into a system
 that can only take roughly 600 million a day, or
 maybe 800 million a day.
 - And so they essentially then allocate that based on nominations. And so there's this constant looking at what can I really get my gas into that system, or am I going to be nom'd back.
- 12 El Paso and SoCalGas and Transwestern

 13 have the same issues that confront them. And so

 14 we think if you put the same type of system in

 15 southern California as in our system, you can get

 16 the interstates and the intrastates on a

 17 scheduling basis, on a daily basis, matched up

 18 much better.
 - And we believe, because I know we want to deliver more gas into southern California, we believe that would help the market, as well.
 - COMMISSIONER BROWNELL: For those of us who didn't grow up in the system, tell us the history of how two different systems evolved in the same state, a big one, of course, but two

- 1 different systems.
- 2 MR. THOMAS: Well, for us back in -- we
- 3 had probably 20 different rate proceedings that
- 4 were going on back in '94 through '96, '97 --
- 5 through '96 timeframe, including reasonableness
- 6 issues around our Canadian gas supply; the fact
- 7 that we were holding capacity on the El Paso
- 8 system and we did not need it for the market
- 9 anymore.
- 10 And so we essentially settled out
- 11 roughly 20 different cases. As part of that we
- 12 settled on a structure with around 25 different
- 13 consumer groups and end-user representatives.
- 14 And so as part of that settlement that
- was put in place in 1998.
- 16 Trina, southern California?
- 17 MS. HORNER: SoCalGas, by contrast, as
- 18 Dan said, has a system whereby they basically
- charge their shippers on a volumetric basis. So
- 20 all their firm costs essentially are recovered on,
- 21 you know, on the basis of how much gas you move.
- 22 And you don't have the ability to
- 23 contract for a firm tradeable right the way you do
- on an interstate pipeline or on PG&E's system.
- 25 And that is an issue that's been, right now is

- 1 pending before the PUC.
- And, you know, it's an issue that came
- 3 up for us a number of years ago, and we've been
- 4 looking long and hard at that. I think we were
- 5 poised to make a decision in that case. And right
- 6 now, you know, starting last fall when the market
- just absolutely went haywire with, you know,
- 8 border prices up to \$60 some days, we've been
- 9 really trying to be sure that any policy that we
- 10 adopt for SoCalGas' system doesn't make its
- 11 shippers worse off.
- 12 In other words, we understand that
- 13 shippers probably -- certain shippers, not all of
- 14 them, would like some more certainty in the
- ability to contract for a firm tradeable right,
- 16 all the way from say Malin down through into the
- 17 SoCalGas system.
- 18 On the other hand, we wanted to be very
- careful that we not throw the market, the southern
- 20 California market, into more chaos by further
- 21 unbundling the SoCalGas system and establishing
- those firm tradeable rights in a time when the
- 23 system was, you know, used pretty close to a
- hundred percent.
- 25 So, it's definitely an issue that we

- 1 need to sort out in California, especially now
- 2 that the market is calming down.
- 3 COMMISSIONER BROWNELL: Thank you.
- 4 PRESIDING MEMBER MOORE: With your
- 5 indulgence I need to interrupt Dan, if I can, and
- 6 bring on, we've got two more presentations --
- 7 COMMISSIONER BROWNELL: We'll get Dan
- 8 later on the infamous accords.
- 9 PRESIDING MEMBER MOORE: -- across the
- state. I'm sure he'd be very happy to be here.
- 11 So, if I can ask the Wild Goose Storage
- folks to come up. And they've got about ten
- 13 minutes or a little bit less. And then we'll have
- ten minutes for Calpine. We'll still get across
- this briefing in time.
- 16 MR. DAVIES: Well, thank you very much
- for inviting us, Commissioner Moore. And I will
- 18 be brief.
- 19 Let me start by telling you a little bit
- about Wild Goose Storage, just so you have a
- 21 context for our remarks.
- 22 Wild Goose Storage is a subsidiary
- company of Alberta Energy Company in Canada.
- 24 Alberta Energy Company is Canada's largest natural
- 25 gas producer, and certainly a company that's well

- 1 known on this side of the border, as well.
- 2 It has, in the storage business, a
- 3 number of investments in independent storage. The
- 4 most well known facility here, of course, is Wild
- 5 Goose. But the facility for which we're best
- 6 known on a continental basis is the AECO facility
- 7 in Alberta, which many people know is the pricing
- 8 point for gas trading on the Canadian market.
- 9 In addition to the AECO facility and
- 10 Wild Goose, we also recently purchased a small
- 11 facility in Oklahoma, as well as in the last year
- 12 we brought on a new facility in Alberta called the
- 13 Heith facility which connects gas between the old
- 14 NOVA system, now called TransCanada, and the new
- 15 Alliance system.
- 16 So that's by way of background as to who
- 17 Wild Goose is. Trina Horner, in her remarks,
- 18 mentioned that we had filed an application to
- 19 expand the Wild Goose facility. That application
- is before the Commission.
- 21 I'll give you an idea of the size of the
- 22 expansion, again just to provide context. The
- 23 current injection maximum is limited to 80 million
- 24 a day, so it's quite small. We're proposing to
- expand that to 450 million a day.

1	The current withdrawal is 200 a day.
2	We're proposing to expand that to 700 a day. And
3	the current inventory, maximum working gas, is 14
4	Bcf, and we're proposing to expand that to 29 Bcf
5	So that's just by way of background. I
6	think it's common amongst next slide, please
7	common amongst everyone in the room that we have
8	an infrastructure crisis in this state.
9	I think I would just characterize it a
10	little differently than what most people have. I
11	think on average the infrastructure in the state
12	works just fine. But the average doesn't count,
13	any more than the average counts on the freeway
14	when you try to get home at rush hour.
15	What counts is can the state's
16	infrastructure meet its peak demands. And we
17	would submit that that's really what's lacking.
18	You've heard a lot of stuff on how
19	electric demand is going to push the gas
20	infrastructure in this state. We certainly
21	believe that. We think it will also change the
22	nature of the peak profile, moving it from a
23	single to a dual peak. And that puts additional
24	stress on all of the infrastructure that gets gas
25	to the burner tip.

1	The position we take is that
2	curtailments can only be avoided therefore with
3	additional peaking infrastructure. The irony is
4	that on a day-to-day basis if you deaggregate the
5	average you'll find that there's sufficient slack
6	capacity within the existing infrastructure today.
7	How does storage figure into all this?
8	Well, storage versus pipeline capacity is superior
9	in two different ways. And let me give you a
10	simple example.
11	If we were to be looking at getting 500
12	million additional units of gas from Malin to the
13	PG&E load center in the Bay Area, you have
14	essentially two alternatives. One is to improve
15	the pipe all the way up to the Malin border. Or,
16	two, to provide some midpoint adjacent to the
17	citygates, midpoint storage along the way.
18	If you are going with the former you've
19	got to loop the pipe at great expense all the way
20	up to the border. If you're going with storage,
21	assuming that it has ample capacity upstream of
22	storage to fill it during the shoulder season, all
23	you need to do to provide capacity to meet the
24	winter or summer peak is to increase the capacity
25	from the storage point to the load center.

1	So depending upon where your storage is
2	located, if it's relatively close to the load
3	center, improving storage gives you peak
4	deliverability at a much more economically
5	efficient basis than looping the pipe.
6	The second thing is that it's more
7	reliable. It won't be diverted by upstream
8	markets. And it's less at risk for facility
9	outages. It's adjacent to the load center.
10	So, the other benefits of storage, which
11	again are systemic, they spread over all users of
12	the system, is that as storage customers sell into
13	peak markets you're dampening the price. We have
14	a study which we've submitted with our application
15	which demonstrates very significant systemic
16	benefits. And if the Commissioners would like
17	copies of that report I can make it available.
18	COMMISSIONER BROWNELL: We would.
19	MR. DAVIES: Thank you. I'll then skip
20	over to the next slide, titled, to encourage
21	storage development.
22	First of all, don't rebundle, don't
23	rebundle. If you do that you'll kill independent
24	storage. There are far too many cross-subsidies
25	that get in play for independent storage to have a

- 1 hope of surviving in a rebundled environment.
- 2 COMMISSIONER WOOD: Is there a push to
- 3 rebundle?
- 4 MR. DAVIES: Pardon me?
- 5 COMMISSIONER WOOD: Is there a push
- 6 anywhere to rebundle?
- 7 MR. DAVIES: Well, one case in point, we
- 8 looked at the draft report that Commissioner
- 9 Moore's Committee has just put out, and the only
- 10 thing we disagreed with in the whole piece was
- 11 their position on rebundling.
- The problem with rebundling is, of
- 13 course, you kill the independent storage. And
- 14 with it, you kill the pricing signals that are
- going into the market to improve the
- infrastructure, et cetera.
- 17 I also would take issue with some of the
- 18 characterization of last summer. I think we have
- to realize that last summer was a collision; it
- was almost the "perfect storm" and that carried
- into the winter, as well.
- 22 First of all, as you know and will come
- 23 to know even more, the natural gas market
- functions as a continental market made up of
- 25 several regional markets, of which California is

- 1 one.
- I think on a continental basis the
- 3 market is working well. In this region we have
- 4 some challenges which I suspect are unique to this
- 5 region.
- 6 First of all, we've had phenomenal
- 7 growth in this state, and it's been year after
- 8 year after year of growth. Not the least of which
- 9 is the electrical demand. And that's used up any
- 10 slack capacity that's been in the system.
- 11 The other effect that's had, and this
- 12 goes back to economics 101, I mean when you've got
- inelastic supply, you're getting as much gas as
- 14 you can as possible, and inelastic demand on the
- other hand, when those two cross you get
- 16 exponential pricing, which is what we saw.
- 17 So what you're seeing in this market is
- 18 a classic case of insufficient delivery to a
- market that has to have gas, has to have the gas.
- 20 And that's what's driven the whole problem.
- Now, it was made worse, I said it was a
- 22 perfect storm because, of course, we had a supply
- 23 constraint due to the El Paso explosion. We had
- new transmission capacity come on line from
- 25 western Canada, so that this market had to compete

- 1 with the midwest market for gas, which was a new
- 2 phenomenon that hasn't yet found its way through
- 3 the market.
- 4 And in addition to that, the northwest
- 5 had an unseasonably cold and dry winter which
- 6 caused significant upstream diversions to happen.
- 7 As I say, all of which conspired to create the
- 8 "perfect storm."
- 9 We submit that the answer to that, in
- 10 part, is to encourage additional storage
- 11 development.
- 12 I'm going to flip ahead here because my
- 13 friends from Calpine deserve time, as well, here.
- 14 So I'll go to the third-to-last slide, if I may.
- 15 Insure utilities have the incentive. And my point
- 16 here is that what independent storage needs to
- 17 thrive is to connect to a backbone system which
- 18 can take the gas during the withdrawal peak and
- 19 can deliver the gas to the storage system in
- 20 sufficient quantities to refill storage during the
- lulls in the system.
- So we need backbone system. We need no
- 23 discriminatory tolls imposed on independent
- 24 customers. And we need to insure, in fairness to
- 25 the utility, that it's given fair cost recovery

1	for doing all of that.	All of those	are
2	challenges that I think	lay ahead of	us in this
3	jurisdiction.		

Next slide, please. I think the other things that help encourage storage development would be to allow independent storage to compete for core businesses, as well as to provide balancing services to transmission customers.

The other point that I think we should make is that there are significant barriers to entry for storage, one of which is a second eminent domain hearing that's required. Our planning process tells us to expect six to eight months after getting a CPCN to go through that process if there's hostile landowner reaction to the CPCN.

And that, you know, that just delays the misery in not getting peaking facilities on the market.

Also, we feel that you could reduce another barrier to entry by reducing the lag associated with requiring expansions of an existing facility within an existing CPCN. And we would submit that so long as the CEQA, the California Environmental Quality Act, as long as

- 1 the process that is envisaged by that legislation
- is followed, then that's all that need be looked
- 3 at.
- 4 Finally, I think one thing that is very
- 5 important and very much in your court and in other
- 6 governmental agencies' courts is to create a
- 7 climate of political and regulatory certainty.
- 8 Infrastructure improvements require
- 9 significant capital investment, significant risk
- 10 for shareholders. Most energy companies with
- 11 which I'm familiar are not opportunity
- 12 constrained, they're resource constrained.
- 13 Capital within any company has to
- 14 compete for alternative markets. All of us have
- our pet projects. The one that gets approved is
- 16 going to be the one that offers the best risk
- 17 versus reward type of equation. And political
- 18 risk and regulatory risk are two of those factors
- that have to be addressed, as well.
- 20 COMMISSIONER WOOD: Your segment is so
- 21 critical to kind of the overall solution here,
- that it's funny to think ten years ago I don't
- 23 even know that there was any independent storage
- anywhere.
- 25 MR. DAVIES: Storage was part of the

- bundled system until fairly recently.
- 2 COMMISSIONER WOOD: Yeah, and so when
- 3 they unbundled them in the federal level at 636
- 4 order, in subsequent actions I guess at different
- 5 state levels, that's when a lot of this really
- 6 popped out of the box.
- 7 MR. DAVIES: I think it's important for
- 8 me just to characterize one thing before I turn it
- 9 over to Calpine, and that is that this Commission
- 10 has been very aggressive in pushing independent
- 11 storage. And we've had a very good reception, not
- 12 only to our first application, but so far to our
- 13 second application.
- 14 And the Lodi folks, who have another
- facility, found the same thing. So, --
- 16 COMMISSIONER WOOD: While I've got you
- 17 here, was your storage fully injected as of last
- 18 November?
- MR. DAVIES: Was it --
- 20 COMMISSIONER WOOD: Fully utilized? Was
- it filled up?
- MR. DAVIES: No, actually we were under-
- 23 utilized last year. And we found that the storage
- 24 market woke up, the customers --
- 25 COMMISSIONER WOOD: Because everyone

- 1 thought that \$5 gas was so expensive they never
- 2 injected it?
- 3 MR. DAVIES: There were some pretty
- 4 confused pricing signals in the market last
- 5 summer. You know, anybody who had gas in storage
- 6 last summer was looking forward to winter where
- 7 his gas, at least when he was looking forward from
- 8 the summer, his was worth less in the winter than
- 9 it was in the summer.
- 10 COMMISSIONER WOOD: Yeah, what are you
- 11 seeing as of up to today?
- MR. DAVIES: What are we seeing?
- COMMISSIONER WOOD: Injections --
- 14 MR. DAVIES: We've had two open seasons.
- 15 One to sell out the base project, and two to take
- 16 expressions of interest in the expanded project.
- 17 And we've sold out each of those.
- 18 COMMISSIONER WOOD: But as far as, I'm
- sorry, current month activity. Are you injecting
- 20 pretty heavily now?
- 21 MR. DAVIES: Yes. Yes. We're ahead of
- 22 where we've been in the past in injections. In
- fact, that's true over the continent. The AJ
- 24 numbers indicate that there's --
- 25 COMMISSIONER WOOD: Yeah, this last week

- 1 has really knocked the top out of the gas price.
- Well, that's what storage is for.
- MR. DAVIES: Thank you very much.
- 4 COMMISSIONER WOOD: Thank you,
- 5 appreciate it.
- 6 PRESIDING MEMBER MOORE: Commissioners,
- 7 our last presentation is from Calpine with Ron
- 8 Walter and Craig Chancellor, who would like to
- 9 talk to you about their stuff. And then we'll
- 10 call that a wrap on the day. Thank you.
- 11 MR. WALTER: Thanks, Commissioners. My
- 12 name's Ron Walter, Senior Vice President and one
- of the founders of Calpine Corporation.
- 14 As you know, we're a power generation
- 15 company, but we're here today to talk for a few
- 16 minutes about an exciting new gas pipeline project
- that we're involved with.
- 18 As sort of a backdrop I wanted to let
- 19 you know that Calpine, we've been in business
- 20 since 1984. We are in the business of building,
- owning, operating natural gas fired power plants,
- as well as geothermal. We're the largest
- geothermal generator in the world. And that
- 24 happens to be, fortunately for Californians, here
- in California.

1	Today we have a very big program going
2	on throughout the country to build new gas-fired
3	generation. We're on a pace to build 70,000
4	megawatts of new generation by 2005. That's
5	enough for 70 million households. It will make us
6	the largest generator in the country.
7	Today we have 40,000 megawatts that is
8	either in operation, under construction or
9	announced and about to go into construction. This
10	is the largest construction program for power
11	plants in the history of the world.
12	We not only are working here in
13	California, but in 30 different states. I was
14	thinking back today, the first two power plants we
15	decided to build when we launched this program
16	were the Pasadena Plant in Texas and the Sutter
17	Power Plant here in California.
18	Pasadena went on line, as you know,
19	Commissioner Wood, last summer. And Sutter, cross
20	our fingers, is in its final testing. It will go
21	on line July 2nd, and provide about 550 new
22	megawatts for California.
23	The next slide, just to take a couple
24	minutes before I turn it over to Craig back one
25	slide, please. This slide didn't get in there,

- that's fine, you have a copy of it there.
- We've embarked on a program in
- 3 California to build approximately 12,000 megawatts
- 4 a year in this state or accessible to this state.
- 5 Today we have 1300 megawatts in operation. About
- 6 3000 megawatts under construction. And some of
- 7 those will go on line, as I said, this summer.
- 8 And an announced additional 4000.
- 9 This will be a \$6 billion program as an
- 10 independent power company that we're investing in
- 11 this state. And by 2005 we'll be able to supply
- 12 12 million households in California.
- 13 This is going to take a lot of gas. And
- in 2005 we'll consume, as a company in California,
- 2 Bcf. And so there's a tremendous need for us to
- 16 be --
- 17 COMMISSIONER BROWNELL: Could you say
- 18 that again?
- MR. WALTER: About 2 Bcf a day.
- 20 COMMISSIONER WOOD: Now that compares to
- 21 Dan's slide from before that the PG&E backbone
- through-put today is right at 1 Bcf. So you're
- saying you would double what PG&E uses today?
- MR. WALTER: That's right. That's
- 25 right.

1	COMMISSIONER WOOD: Just for the Calpine
2	fleet?
3	MR. WALTER: That's for the Calpine
4	fleet.
5	So, to tell you one way that we're
6	embarking on to help provide that additional
7	infrastructure, I wanted to ask Craig Chancellor,
8	who manages our gas regulatory affairs, to talk
9	about the Sonoran Pipeline.
L 0	MR. CHANCELLOR: Now if you'll jump
11	right to slide 7. Our approach for Calpine in
L 2	managing our fuel is what you've heard here is
L 3	more of a portfolio approach. We're investing not
L 4	only in gas reserves here in California, we're
L 5	also investing in pipeline infrastructure.
L 6	And slide number eight here really does
L 7	show what we're doing relative to backing up our
L 8	investment in the power plant side with an
19	investment in pipeline into California.
20	We're partnering up with Kinder Morgan
21	on a 50/50 joint venture to build a pipeline from
22	San Juan Basin Blanco all the way up to the Bay
23	Area.
2 4	We're proposing this in two phases. The

first phase is about 750 a day going to the

- 1 border. And then 1 Bcf to 1.5 Bcf going north.
- That's for a couple of reasons. One is in the,
- 3 what we see as also a lack of capacity within the
- 4 state that's necessary.
- 5 There's additional capacity expansions
- 6 being announced in progress through Kern, El Paso,
- 7 Transwestern. So we'll have additional capacity
- 8 to move up north.
- 9 COMMISSIONER WOOD: I'm sorry, what were
- 10 the interstate was how much capacity?
- MR. CHANCELLOR: Within the state it
- will be about 1 Bcf to 1.5 Bcf. We've got
- interest so far of 1.5 Bcf within California.
- 14 COMMISSIONER WOOD: And then up to
- 15 California?
- 16 MR. CHANCELLOR: 750. We have interest
- of 1 Bcf on that side right now.
- 18 The open season has been completed and
- we're going through the process right now to
- 20 finalize the bidding process, to secure up the
- 21 bids. The way the open season process works, you
- don't always get the perfect bids. You put out
- 23 your parameters, and the market then comes back
- with what they're looking for.
- 25 So we're working with customers right

- now to firm those up. We look to do that in the
 next 30 to 60 days. And then have a filing that
 we can make to FERC at the end of this year. With
 the first gas flowing, at least on phase one, in

 2003; phase two, 2004.

 COMMISSIONER WOOD: Is phase one -- let
 me go back to your -- so phase one is the out-ofstate?

 MR. CHANCELLOR: Right, from the Basin
- 11 COMMISSIONER WOOD: Okay.

to the border.

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21

- MR. CHANCELLOR: The benefits we feel -
 there's some detail in here, and we can certainly

 get you a lot more detail on this as it moves

 forward -- if you switch to slide 11, the benefits

 we see from this, you've heard that infrastructure

 is needed. We agree with Wild Goose, that storage

 is part of that.
 - We also say that basic pipeline is needed to fill that storage. And to meet our needs, as well as the rest of the market.
- We see that capacity provide a benefit
 of moderating that gas price. That's the big
 benefit. It allows us to secure long, firm
 transportation to match with the long-term

- 1 contracts that we're doing on the power side.
- 2 We want to make sure that, you know,
- 3 these commitments that we've made to the state,
- 4 that we can back up by having a gas supply there
- 5 and available.
- 6 COMMISSIONER WOOD: What drove your
- 7 choice on build it yourself versus buy it from, or
- 8 lease it from one of the incumbents?
- 9 MR. CHANCELLOR: Several things. Within
- 10 the state right now, I mean you've got SoCalGas,
- 11 you've got PG&E. A lot of our capacity we're
- 12 building power generation is in the northern side
- 13 of the state. And there are certain regulatory
- 14 hurdles. Right now we can't get capacity. We're
- participating in PG&E's open season, but you can't
- get capacity beyond 2002.
- 17 The rate certainty is unsure. And their
- 18 expansion is going to be from the north, not from
- 19 the south. And we want to have gas competition
- 20 from both sides, from both Canada and from the
- 21 Southwest.
- 22 COMMISSIONER WOOD: You're not building
- from the north. Is --
- MR. CHANCELLOR: No.
- 25 COMMISSIONER WOOD: -- that because of

1	what we just heard from Dan that they're planning
2	on building, themselves, to
3	MR. CHANCELLOR: Yeah, PGT Northwest,
4	the affiliate, has done expansions. And we've
5	participated in that. And also PG&E can easily
6	expand it, and quite inexpensively, by at least
7	200 a day.
8	COMMISSIONER WOOD: So would Calpine
9	then retain firm transmission rights to both
10	production basins?
11	MR. CHANCELLOR: Yes. Yes. We already
12	hold transmission rights on the Redwood Path. We
13	plan on participating again for capacity coming
14	from Canada.
15	We have reserves in Canada that we have
16	purchased that we would like to move south.
17	So we look at this as a way, it's not
18	the total solution, it's part of the solution.
19	There's a lot of gas demand we see coming on, not
20	just looking at Calpine, alone.
21	This pipeline, itself, will not meet all
22	of our demand. And we don't intend it to. Again,
23	we want to make sure we have a diverse portfolio.

Storage; gas from Canada; gas from the Rockies;

gas from these other pipelines.

24

25

1	One thing the Sonoran does it brings in
2	an additional competitor. It's not just an
3	expansion of an existing system. It brings in
4	another competitor that will help modify not only
5	the gas prices, but the transportation prices in
6	the long term.
7	COMMISSIONER WOOD: Thank you.
8	MR. CHANCELLOR: Thank you very much.
9	COMMISSIONER BROWNELL: Anything that we
10	can do, or either of the California Commissions
11	can and should do to make your lives easier?
12	MR. CHANCELLOR: Yes, one thing, and
13	we've been to the FERC Staff talking to them, one
14	thing we're looking at is trying, because of the
15	different environmental requirements between
16	California and the CEQA process, and what's going
17	to be occurring on phase one, we'd like to come in
18	and phase the environmental aspect of it.
19	I mean this is a large piece of pipe.
20	Instead of just having all the environmental, we'd
21	like a PDA early on, on the project, and then
22	phase the two environmental aspects of it, if
23	possible.
24	COMMISSIONER BROWNELL: Great, thanks.

MR. CHANCELLOR: Still working with

- 1 staff to try to figure out the best way to do
- 2 that.
- 3 COMMISSIONER WOOD: Great.
- 4 COMMISSIONER BROWNELL: Thank you.
- 5 PRESIDING MEMBER MOORE: Thank you very
- 6 much.
- 7 Commissioners, as far as the prepared
- 8 presentations and the remarks of the staff, I have
- 9 to say we're at a conclusion point. And I know
- 10 that time is very dear at this point.
- 11 So, obviously, Commissioner, the floor
- is yours. But on behalf of the California
- 13 Commission, both Commissions, I would say I'm so
- 14 glad you came and we're honored to have had you
- 15 and your attention on this. And stand ready to do
- it again whenever you'd like.
- 17 COMMISSIONER WOOD: Well, to quote
- another Californian, "We'll be back."
- 19 COMMISSIONER BROWNELL: I've said that,
- 20 I'm not a Californian.
- 21 COMMISSIONER WOOD: Arnold. I want to
- 22 thank you, Michal, for your hospitality and that
- of your colleagues and the staff here at the
- 24 Commission for letting us come in and exercise a
- 25 little squatter's rights for a day. And thank

- this gentlewoman for the transcription, which will
- 2 keep us legal back at our home shop.
- I want to also recognize with us Cindy
- 4 Marlette is Deputy General Counsel of the FERC.
- 5 And Bob McNally from the National Energy Council
- 6 at the White House is here to kind of listen and
- 7 learn. As the President met with Governor Davis a
- 8 few weeks ago, and I think they both agreed that
- 9 the gas transportation issue was something of
- 10 concern. And we aren't to the bottom of it yet,
- 11 but today's hearing helped us get some issues
- framed from some of you all here.
- 13 We certainly heard a lot from our own
- 14 staffs and from talking to the staffs of other
- 15 agencies, as well. But, you know, this is kind of
- 16 a critical piece. Our job is to solve problems,
- and I think we've found one.
- 18 Certainly when you look at the map of
- the United States and you see well, where are the
- gas prices unusually high. They happen to be at
- 21 the northern border of California, and even moreso
- 22 at the southern border of California.
- And there may be other issues, but
- 24 certainly hearing today infrastructure is a big
- one. And we want to kind of look deeply into that

- issue and see what we can do from our side.
- 2 Clearly we got a nice task list here.
- 3 I know from talking to President Lynch
- 4 and from Trina, appreciate you all being here
- 5 today, as well, know you all have got an
- 6 aggressive punchlist there.
- 7 And certainly from reading the report
- 8 that started all this interest in the visit from
- 9 you, Michal, you all have got a punchlist to do,
- 10 too.
- 11 So, we look forward to us working
- 12 together to get these problems solved so that your
- 13 customers can get the benefits of the competitive
- world they were promised.
- 15 COMMISSIONER BROWNELL: I can hardly add
- 16 to that eloquent statement, other than to say,
- 17 Michal, thank you. This has been enormously
- 18 helpful. Thanks to the Commission and many of our
- 19 hosts today. And thanks for all of you who
- 20 participated.
- These are difficult issues, and you're
- 22 all challenged with implementing business plans
- 23 that require regulatory certainty. And frankly,
- 24 regulatory cooperation. We all have a role to
- 25 play. And one of our goals here is to establish a

	partnership with the commissions and with the
2	state, so that we're clear and we're all marching
3	to the same drummer.
4	We cannot let the crisis consume us to
5	the extent that we do not look at longer term
6	issues. These are long-term economic development
7	issues and we need to start focusing on the
8	solutions so that not only can we bring the
9	benefits of competition, we can surely commit to
10	being able to support the enormous growth that
11	California has enjoyed, but, indeed, that the
12	region has enjoyed and should enjoy. So, thank
13	you, and I look forward to coming back.
14	PRESIDING MEMBER MOORE: You will be
15	welcome when you do. Thank you very much.
16	COMMISSIONER WOOD: If anybody has any
17	further comments they'd like to provide in writing
18	to the Commission, our street address is 888 First
19	Street, N.E., Washington, D.C. 20426. And we
20	would love to read anything you got.
21	PRESIDING MEMBER MOORE: Thank you,
22	Commissioners.
23	COMMISSIONER WOOD: Thank you, all.
24	(Whereupon, at 5:25 p.m., the meeting
25	was adjourned.

CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic

Reporter, do hereby certify that I am a

disinterested person herein; that I recorded the

foregoing California Energy Commission Meeting;

that it was thereafter transcribed into

typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said meeting, nor in any way interested in outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of June, 2001.

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